Chao Zhang

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

| 597 | 5,211 | 37 | 50 |
|--------------------|----------------------|--------------------|-----------------|
| papers | citations | h-index | g-index |
| 769 ext. papers | 6,704 ext. citations | 2.6 avg, IF | 5.97 L-index |

| # | Paper | IF | Citations |
|-----|--|-----|-----------|
| 597 | Barrier Lowering-Induced Capacitance Increase of Short-Channel Power p-GaN HEMTs at High Temperature. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-5 | 2.9 | |
| 596 | Cut-Off Degradation of Output Current Induced by High Fluence Neutron Radiation in High-Voltage Silicon-on-Insulator Lateral Double-Diffused MOSFET. <i>IEEE Electron Device Letters</i> , 2022 , 43, 108-111 | 4.4 | 1 |
| 595 | Enhanced Reverse Recovery Performance in Superjunction MOSFET with Reduced Hole-Barrier. <i>ECS Journal of Solid State Science and Technology</i> , 2022 , 11, 015002 | 2 | |
| 594 | Reverse Blocking GaN High Electron Mobility Transistors with Stepped P-GaN Drain. <i>ECS Journal of Solid State Science and Technology</i> , 2022 , 11, 025002 | 2 | |
| 593 | Temperature Dependence of Pulsed Power Performance of Insulated Gate Trigger Thyristor. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-8 | 2.9 | |
| 592 | A Novel Trench-Gated Vertical GaN Transistor With Dual-Current-Aperture by Electric-field Engineering for High Breakdown Voltage. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-7 | 2.9 | O |
| 591 | Review of technologies for high-voltage integrated circuits. <i>Tsinghua Science and Technology</i> , 2022 , 27, 495-511 | 3.4 | 1 |
| 590 | A Novel Thyristor-Based Bidirectional SSCB With Controllable Current Breaking Capability. <i>IEEE Transactions on Power Electronics</i> , 2022 , 37, 4526-4534 | 7.2 | 4 |
| 589 | A Fast-Transient Capacitor-Less LDO With Dual Paths Active-Frequency Compensation Scheme. <i>IEEE Transactions on Power Electronics</i> , 2022 , 1-1 | 7.2 | O |
| 588 | A High-Performance 330-GHz Subharmonic Mixer Using Schottky Diodes. <i>IEEE Microwave and Wireless Components Letters</i> , 2022 , 1-4 | 2.6 | |
| 587 | Experiments of Homogenization Field LDMOS With Trench-Stopped Depletion. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-6 | 2.9 | 1 |
| 586 | Investigation of Failure Mechanisms of 1200V Rated Trench SiC MOSFETs under Repetitive Avalanche Stress. <i>IEEE Transactions on Power Electronics</i> , 2022 , 1-1 | 7.2 | 1 |
| 585 | Investigation on Total-Ionizing-Dose Radiation Response for 700V Double-RESURF SOI LDMOS. <i>IEEE Transactions on Nuclear Science</i> , 2022 , 1-1 | 1.7 | 1 |
| 584 | Reverse Blocking p-GaN Gate HEMTs with Multi-column p-GaN/Schottky Alternate-island Drain. <i>IEEE Electron Device Letters</i> , 2022 , 1-1 | 4.4 | 0 |
| 583 | 650 V Super-Junction Insulated Gate Bipolar Transistor Based on 45 fh Ultrathin Wafer Technology. <i>IEEE Electron Device Letters</i> , 2022 , 43, 592-595 | 4.4 | 1 |
| 582 | Non-resonant soft-switching technique with linear current on switching cycle time-scale for switched-capacitor DC-DC converters. <i>IET Power Electronics</i> , 2022 , 15, 287-305 | 2.2 | 1 |
| 581 | Numerical Analysis for a P-Drift Region N-IGBT With Enhanced Dynamic Electric Field Modulation Effect. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-6 | 2.9 | 1 |

(2021-2022)

| 580 | A Novel Gate-to-Source ESD Protection Clamp for GaN HEMT. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-6 | 2.9 | | |
|-----|--|-----|----|--|
| 579 | A Gradient Doped Integrated JFET With Improved Current Capability for HV Start-up Circuit. <i>IEEE Electron Device Letters</i> , 2022 , 1-1 | 4.4 | | |
| 578 | Investigation and Modeling of the Avalanche Failure Mechanism of 1.2-kV 4H-SiC JMOS. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 6313-6320 | 2.9 | | |
| 577 | Mechanisms and characteristics of a low-loss split gate trench MOSFET with shield layer. Microelectronics Journal, 2021, 118, 105310 | 1.8 | Ο | |
| 576 | Analysis of Energy Loss in GaN E-mode Devices under UIS Stresses. <i>IEEE Transactions on Power Electronics</i> , 2021 , 1-1 | 7.2 | O | |
| 575 | A 200🛮25-GHz Manifold-Coupled Multiplexer Utilizing Metal Waveguides. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2021 , 1-1 | 4.1 | 22 | |
| 574 | Wideband Dual-Circular-Polarization Antenna with High Isolation for Millimeter-Wave Wireless Communications. <i>IEEE Transactions on Antennas and Propagation</i> , 2021 , 1-1 | 4.9 | 2 | |
| 573 | Investigation of breakdown voltage degradation in low-voltage narrow gate trench MOSFET by edge termination optimization. <i>Semiconductor Science and Technology</i> , 2021 , 36, 115014 | 1.8 | | |
| 572 | A novel GaN vertical junction field-effect transistor with intrinsic reverse conduction capability and kilo-volt breakdown voltage. <i>Semiconductor Science and Technology</i> , 2021 , 36, 024004 | 1.8 | 1 | |
| 571 | A Novel SiC MOSFET With Embedded Auto-Adjust JFET With Improved Short Circuit Performance. <i>IEEE Electron Device Letters</i> , 2021 , 1-1 | 4.4 | 1 | |
| 570 | An analytical model on the gate control capability in p-GaN Gate AlGaN/GaN high-electron-mobility transistors considering buffer acceptor traps. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 095107 | 3 | 2 | |
| 569 | Evaluation of an Effective DC Solid State Circuit Breaker Based on CS-MCT 2021 , | | 1 | |
| 568 | . IEEE Transactions on Electron Devices, 2021 , 68, 1542-1549 | 2.9 | 1 | |
| 567 | Improved Model on Buried-Oxide Damage Induced by Total-Ionizing-Dose Effect for HV SOI LDMOS. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 2064-2070 | 2.9 | 3 | |
| 566 | Low Switching Loss and EMI Noise IGBT With Self-Adaptive Hole-Extracting Path. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 2572-2576 | 2.9 | 2 | |
| 565 | Analytical Design and Experimental Verification of Lateral Superjunction Based on Global Region Normalization Method. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 2372-2377 | 2.9 | 3 | |
| 564 | Design of Hybrid Dual-Path DC-DC Converter with Wide Input Voltage Efficiency Improvement 2021 , | | 3 | |
| 563 | A Fast-Transient Low-Dropout Regulator With Current-Efficient Super Transconductance Cell and Dynamic Reference Control. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021 , 68, 2354-2 | 367 | 5 | |

| 562 | Total-Ionizing-Dose Radiation-Induced Dual-Channel Leakage Current at Unclosed Edge Termination for High Voltage SOI LDMOS. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 2861-2866 | 2.9 | 3 |
|-----|--|-----|----|
| 561 | . IEEE Transactions on Power Electronics, 2021 , 36, 8300-8307 | 7.2 | 5 |
| 560 | Failure Mechanism of Avalanche Condition for 1200-V Double Trench SiC MOSFET. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2021 , 9, 2147-2154 | 5.6 | 8 |
| 559 | Voltage Coupling Enhancement for Transient Gate Overvoltage Suppression of Insulated Gate Trigger Thyristor in Ultrahigh di/dt Pulse Applications. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 3346-3353 | 7.2 | O |
| 558 | Investigation on Short-Circuit Characterization and Optimization of 3.3-kV SiC MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 184-191 | 2.9 | 3 |
| 557 | A Novel Synchronous Rectification with Directly Frequency Tracking for Automotive Alternator. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 1-1 | 8.9 | O |
| 556 | Influence of the Acceptor-Type Trap on the Threshold Voltage of the Short-Channel GaN MOS-HEMT. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 9, 606-611 | 2.3 | 1 |
| 555 | Experiments of a Lateral Power Device With Complementary Homogenization Field Structure. <i>IEEE Electron Device Letters</i> , 2021 , 1-1 | 4.4 | 2 |
| 554 | A Novel SiC Asymmetric Cell Trench MOSFET With Split Gate and Integrated JBS Diode. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 9, 713-721 | 2.3 | 3 |
| 553 | A low turn-on voltage AlGaN/GaN lateral field-effect rectifier compatible with p-GaN gate HEMT technology. <i>Semiconductor Science and Technology</i> , 2021 , 36, 034004 | 1.8 | 1 |
| 552 | A Superjunction MOSFET with Ultralow Reverse Recovery Charge and Low Switching Losses. Journal of Electronic Materials, 2021 , 50, 6297-6306 | 1.9 | 1 |
| 551 | Experimental Realization of Ultralow ON-Resistance LDMOS With Optimized Layout. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 4168-4172 | 2.9 | 1 |
| 550 | Analytical Model and Mechanism of Homogenization Field for Lateral Power Devices. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 3956-3962 | 2.9 | 2 |
| 549 | Deep Understanding of Negative Gate Voltage Restriction for SiC mosfet Under Wide Temperature Range. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 8622-8627 | 7.2 | 1 |
| 548 | Seamless Mode-Switch Control Scheme for Primary Side Regulation Flyback With Capacitorless Self-Adaptive Startup. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 9668-9677 | 7.2 | 1 |
| 547 | A mechanical reliability study of 3-dB waveguide hybrid couplers in submillimeter and terahertz bands. <i>Frontiers of Information Technology and Electronic Engineering</i> , 2021 , 22, 1104-1113 | 2.2 | 24 |
| 546 | Simulation Study of a High Gate-to-Source ESD Robustness Power p-GaN HEMT With Self-Triggered Discharging Channel. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 4536-4542 | 2.9 | 1 |
| 545 | An Efficient and Reliable Solid-State Circuit Breaker Based on Mixture Device. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 9767-9771 | 7.2 | 9 |

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| 544 | Design Techniques of Sub-ns Level Shifters With Ultrahigh dV/dt Immunity for Various Wide-Bandgap Applications. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 10447-10460 | 7.2 | 4 |
|-----|---|-------------|---|
| 543 | Injection enhanced SiC planar gate IGBT with partial Schottky contact emitter. <i>Materials Science in Semiconductor Processing</i> , 2021 , 134, 106026 | 4.3 | |
| 542 | Design of an Isolated Circuit Breaker With Robust Interruption Capability for DC Microgrid Protection. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 68, 12408-12417 | 8.9 | 5 |
| 541 | Low Loss and Low EMI Noise CSTBT With Split Gate and Recessed Emitter Trench. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 9, 704-712 | 2.3 | O |
| 540 | Simulation Study of an Ultralow Switching Loss p-GaN Gate HEMT With Dynamic Charge Storage Mechanism. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 175-183 | 2.9 | 8 |
| 539 | Analyses and Experiments of Ultralow Specific On-resistance LDMOS with Integrated Diodes. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 1-1 | 2.3 | 1 |
| 538 | 2020, | | 3 |
| 537 | Modeling the Influence of the Acceptor-Type Trap on the 2DEG Density for GaN MIS-HEMTs. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 2290-2296 | 2.9 | 2 |
| 536 | Charge storage impact on input capacitance in p-GaN gate AlGaN/GaN power high-electron-mobility transistors. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 305106 | 3 | 8 |
| 535 | Mix-mode forward-biased diode with low clamping voltage for robust ESD applications. <i>Electronics Letters</i> , 2020 , 56, 398-400 | 1.1 | 1 |
| 534 | A Neural Network Assistance AMPPT Solar Energy Harvesting System With 89.39% Efficiency and 0.010.5% Tracking Errors. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020 , 67, 2960-297 | 3 .9 | 5 |
| 533 | A Novel Snapback-Free Reverse-Conducting IGBT with Si/SiC Heterojunction 2020 , | | 1 |
| 532 | Non-Simultaneous Triggering Induced Failure of CS-MCT Under Repetitive High-Current Pulse Condition. <i>IEEE Transactions on Device and Materials Reliability</i> , 2020 , 20, 214-220 | 1.6 | 2 |
| 531 | Shield Gate Trench MOSFET With Narrow Gate Architecture and Low-k Dielectric Layer. <i>IEEE Electron Device Letters</i> , 2020 , 41, 749-752 | 4.4 | 6 |
| 530 | Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 1826-1834 | 1.7 | 7 |
| 529 | Tri-Gated Hybrid Anode AlGaN/GaN Power Diode With Intrinsic Low Turn-on Voltage and Ultralow Reverse Leakage Current. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 1712-1717 | 2.9 | 5 |
| 528 | Ultrathin-Barrier AlGaN/GaN Hybrid-Anode-Diode With Optimized Barrier Thickness for Zero-Bias Microwave Mixer. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 828-833 | 2.9 | 7 |
| 527 | 220 GHz wideband integrated receiver front end based on planar Schottky diodes. <i>Microwave and Optical Technology Letters</i> , 2020 , 62, 2737-2746 | 1.2 | 2 |

| 526 | Analysis of Welding Pad for Terahertz Hybrid Integrated Mixer. <i>IEEE Access</i> , 2020 , 8, 22506-22514 | 3.5 | 1 |
|---|---|-----------------|--------------|
| 525 | Operation mechanism and performance optimization for a novel ultralow loss SOI LIGBT with high current capability. <i>Semiconductor Science and Technology</i> , 2020 , 35, 045005 | 1.8 | |
| 524 | Development of a Wideband 220-GHz Subharmonic Mixer Based on GaAs Monolithic Integration Technology. <i>IEEE Access</i> , 2020 , 8, 31214-31226 | 3.5 | 0 |
| 523 | Experimental Study of 600 V Accumulation-Type Lateral Double-Diffused MOSFET With Ultra-Low On-Resistance. <i>IEEE Electron Device Letters</i> , 2020 , 41, 465-468 | 4.4 | 8 |
| 522 | High performance floating p-well carrier stored trench bipolar transistor with L-shaped shield gates. <i>Electronics Letters</i> , 2020 , 56, 205-207 | 1.1 | 1 |
| 521 | Investigation and Failure Mode of Asymmetric and Double Trench SiC mosfets Under Avalanche Conditions. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 8524-8531 | 7.2 | 14 |
| 520 | GaN Power Integration for High Frequency and High Efficiency Power Applications: A Review. <i>IEEE Access</i> , 2020 , 8, 15529-15542 | 3.5 | 37 |
| 519 | Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 2009-2014 | 1.7 | 5 |
| 518 | Design and Experimental Demonstration of Integrated Over-Current Protection Circuit for GaN DCDC Converters. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2020 , 8, 4270-4278 | 5.6 | 4 |
| | | | |
| 517 | Analysis of Short-Circuit Behavior for SiC MOSFETs with Various Circuit Characteristics 2020 , | | 2 |
| 517 516 | | | 2 |
| | Analysis of Short-Circuit Behavior for SiC MOSFETs with Various Circuit Characteristics 2020 , | 7.2 | |
| 516 | Analysis of Short-Circuit Behavior for SiC MOSFETs with Various Circuit Characteristics 2020 , An Ultra-Low Gate Charge Shield Gate MOSFET with Pinch-Off Region and Schottky Contact 2020 , Design and Experimental Verification of an Efficient SSCB Based on CS-MCT. <i>IEEE Transactions on</i> | | 1 |
| 516 515 | Analysis of Short-Circuit Behavior for SiC MOSFETs with Various Circuit Characteristics 2020, An Ultra-Low Gate Charge Shield Gate MOSFET with Pinch-Off Region and Schottky Contact 2020, Design and Experimental Verification of an Efficient SSCB Based on CS-MCT. <i>IEEE Transactions on Power Electronics</i> , 2020, 35, 11682-11693 Theoretical and Experimental Study on AlGaN/GaN Schottky Barrier Diode on Si Substrate with | 7.2 | 1 |
| 516 515 514 | Analysis of Short-Circuit Behavior for SiC MOSFETs with Various Circuit Characteristics 2020, An Ultra-Low Gate Charge Shield Gate MOSFET with Pinch-Off Region and Schottky Contact 2020, Design and Experimental Verification of an Efficient SSCB Based on CS-MCT. IEEE Transactions on Power Electronics, 2020, 35, 11682-11693 Theoretical and Experimental Study on AlGaN/GaN Schottky Barrier Diode on Si Substrate with Double-Heterojunction. Nanoscale Research Letters, 2020, 15, 149 Ultrathin barrier AlGaN/GaN hybrid-anode-diode with MOCVD in-situ Si3N4-cap and LPCVD-Si3N4 | 7.2 5 | 1 19 2 |
| 516515514513 | Analysis of Short-Circuit Behavior for SiC MOSFETs with Various Circuit Characteristics 2020, An Ultra-Low Gate Charge Shield Gate MOSFET with Pinch-Off Region and Schottky Contact 2020, Design and Experimental Verification of an Efficient SSCB Based on CS-MCT. IEEE Transactions on Power Electronics, 2020, 35, 11682-11693 Theoretical and Experimental Study on AlGaN/GaN Schottky Barrier Diode on Si Substrate with Double-Heterojunction. Nanoscale Research Letters, 2020, 15, 149 Ultrathin barrier AlGaN/GaN hybrid-anode-diode with MOCVD in-situ Si3N4-cap and LPCVD-Si3N4 bilayer passivation stack for dynamic characteristic improvement. Electronics Letters, 2020, 56, 789-791 High voltage trench insulated gate bipolar transistor with MOS structure for self-adjustable hole | 7.2 5 | 1 19 2 |
| 516515514513512 | Analysis of Short-Circuit Behavior for SiC MOSFETs with Various Circuit Characteristics 2020, An Ultra-Low Gate Charge Shield Gate MOSFET with Pinch-Off Region and Schottky Contact 2020, Design and Experimental Verification of an Efficient SSCB Based on CS-MCT. IEEE Transactions on Power Electronics, 2020, 35, 11682-11693 Theoretical and Experimental Study on AlGaN/GaN Schottky Barrier Diode on Si Substrate with Double-Heterojunction. Nanoscale Research Letters, 2020, 15, 149 Ultrathin barrier AlGaN/GaN hybrid-anode-diode with MOCVD in-situ Si3N4-cap and LPCVD-Si3N4 bilayer passivation stack for dynamic characteristic improvement. Electronics Letters, 2020, 56, 789-791 High voltage trench insulated gate bipolar transistor with MOS structure for self-adjustable hole extraction. Semiconductor Science and Technology, 2020, 35, 11LT01 | 7.2 5 1.1 | 1 19 2 0 |

(2020-2020)

| 508 | The research on 220-GHz signal detecting system. <i>International Journal of Numerical Modelling:</i> Electronic Networks, Devices and Fields, 2020 , 33, e2655 | 1 | |
|-----|---|-----|----|
| 507 | High Trigger Current NPN Transistor With Excellent Double-Snapback Performance for High-Voltage Output ESD Protection. <i>IEEE Electron Device Letters</i> , 2020 , 41, 453-456 | 4.4 | О |
| 506 | Experimental study and characterization of an ultrahigh-voltage Ni/4HBiC junction barrier Schottky rectifier with near ideal performances. <i>Superlattices and Microstructures</i> , 2020 , 138, 106381 | 2.8 | 1 |
| 505 | An Ultralow Loss N-channel RB-IGBT with P-drift Region 2020 , | | 2 |
| 504 | Prototype of Edge Computing IPM with Hardware Artificial Neural Network Soft Sensor and Controller for Parallel Connected IGBT Current Distribution 2020 , | | 1 |
| 503 | Development of High Power 220 GHz Frequency Triplers Based on Schottky Diodes. <i>IEEE Access</i> , 2020 , 8, 74401-74412 | 3.5 | 7 |
| 502 | Novel Self-Modulated Lateral Superjunction Device Suppressing the Inherent 3-D JFET Effect. <i>IEEE Electron Device Letters</i> , 2020 , 41, 1392-1395 | 4.4 | 5 |
| 501 | Development of 340-GHz Transceiver Front End Based on GaAs Monolithic Integration Technology for THz Active Imaging Array. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 7924 | 2.6 | 55 |
| 500 | A review of high-voltage integrated power device for AC/DC switching application. <i>Microelectronic Engineering</i> , 2020 , 232, 111416 | 2.5 | 2 |
| 499 | Different JFET Designs on Conduction and Short-Circuit Capability for 3.3 kV Planar-Gate Silicon Carbide MOSFETs. <i>IEEE Journal of the Electron Devices Society</i> , 2020 , 8, 841-845 | 2.3 | 1 |
| 498 | An Error Amplifier With a Low Power Multi-Mode Voltage Clamper for Transient Enhancement and High Reliability. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020 , 67, 4075-4084 | 3.9 | |
| 497 | Design and Anaysis of The Average Current-Detection Method for Wide Input Voltage Range Constant-Current Lighting LED Driver 2020 , | | 1 |
| 496 | Modeling the Displacement Damage on Trigger Current of Anode-Short MOS-Controlled Thyristor. <i>IEEE Journal of the Electron Devices Society</i> , 2020 , 8, 1043-1049 | 2.3 | 2 |
| 495 | Ionization Damage Effects of Pulse Discharge Circuit Switched by Anode-Short MOS-Controlled Thyristor. <i>IEEE Journal of the Electron Devices Society</i> , 2020 , 8, 1096-1104 | 2.3 | 1 |
| 494 | Electrostatic Discharge (ESD) Behavior of p-GaN HEMTs 2020 , | | 4 |
| 493 | Four-hundred gigahertz broadband multi-branch waveguide coupler. <i>IET Microwaves, Antennas and Propagation</i> , 2020 , 14, 1175-1179 | 1.6 | 44 |
| 492 | 10-kV 4H-SiC Drift Step Recovery Diodes (DSRDs) for Compact High-repetition Rate Nanosecond HV Pulse Generator 2020 , | | 3 |
| 491 | A Study on Ionization Damage Effects of Anode-Short MOS-Controlled Thyristor. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 2062-2072 | 1.7 | 5 |

| 490 | Suppression of Hot-Hole Injection in High-Voltage Triple RESURF LDMOS With Sandwich N-P-N Layer: Toward High-Performance and High-Reliability 2020 , | | 5 |
|-----|---|-------------------------|----|
| 489 | A Low Loss and On-State Voltage Superjunction IGBT with Depletion Trench 2020 , | | 2 |
| 488 | Novel Homogenization Field Technology in Lateral Power Devices. <i>IEEE Electron Device Letters</i> , 2020 , 41, 1677-1680 | 4.4 | 6 |
| 487 | Investigating the Failure Mechanism of Short-Circuit Tests in 1.2-kV SiC JBS-Integrated MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 4027-4032 | 2.9 | 2 |
| 486 | High-Performance Ultrathin-Barrier AlGaN/GaN Hybrid Anode Diode With AlDIGate Dielectric and In Situ SiNECap Passivation. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 4136-4140 | 2.9 | 5 |
| 485 | Avalanche Ruggedness Assessment of 1.2kV 45m[Asymmetric Trench SiC MOSFETs. <i>Materials Science Forum</i> , 2020 , 1004, 837-842 | 0.4 | 1 |
| 484 | A Novel Ultralow RON,sp Triple RESURF LDMOS With Sandwich n-p-n Layer. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 5605-5612 | 2.9 | 6 |
| 483 | Embedded Hardware Artificial Neural Network Control for Global and Real-Time Imbalance Current Suppression of Parallel Connected IGBTs. <i>IEEE Transactions on Industrial Electronics</i> , 2020 , 67, 2186-219 | 6 ^{8.9} | 12 |
| 482 | All-GaN Power Integration: Devices to Functional Subcircuits and Converter ICs. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2020 , 8, 31-41 | 5.6 | 13 |
| 481 | A Time-Efficient Automatic Circuit Approximation Method. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020 , 67, 3047-3055 | 3.9 | 2 |
| 480 | The research on 220GHz multicarrier high-speed communication system. <i>China Communications</i> , 2020 , 17, 131-139 | 3 | 66 |
| 479 | Experiments of a Novel low on-resistance LDMOS with 3-D Floating Vertical Field Plate 2019, | | 6 |
| 478 | 4.5kV Insulated Gate Triggered Thyristor (IGTT) with High \$di/dt\$ Characteristics for Pulse Power Applications 2019 , | | 1 |
| 477 | Over Kilovolt GaN Vertical Super-Junction Trench MOSFET: Approach for Device Design and Optimization 2019 , | | 3 |
| 476 | Low On-state Voltage and Latch-up Immunity Thin SOI LIGBT with Multi-Segmented Trench Gates 2019 , | | 3 |
| 475 | An Extraction Method for the Interface Acceptor Distribution of GaN MOS-HEMT. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 4164-4169 | 2.9 | 7 |
| 474 | A Novel CSTBT with Hole Barrier for High \$dV/dt\$ Controllability and Low EMI Noise 2019, | | 6 |
| 473 | Challenges of future high power wireless power transfer for light-duty electric vehiclestechnology and risk management. <i>ETransportation</i> , 2019 , 2, 100012 | 12.7 | 29 |

| 472 | An Ultralow Loss Insulated Gate Bipolar Transistor With Emitter Dual Injection. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 4314-4319 | 2.9 | 3 | |
|-----------------|--|-----|----|--|
| 47 ¹ | A Novel Insulated Gate Triggered Thyristor With Schottky Barrier for Improved Repetitive Pulse Life and High-di/dt Characteristics. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 1018-1025 | 2.9 | 8 | |
| 470 | Novel Silicon-Controlled Rectifier With Snapback-Free Performance for High-Voltage and Robust ESD Protection. <i>IEEE Electron Device Letters</i> , 2019 , 40, 435-438 | 4.4 | 8 | |
| 469 | A 2.6 ppm/LC 2.5 V Piece-Wise Compensated Bandgap Reference with Low Beta Bipolar. <i>Electronics</i> (Switzerland), 2019 , 8, 555 | 2.6 | 2 | |
| 468 | A Half-Select Disturb-Free 11T SRAM Cell With Built-In Write/Read-Assist Scheme for Ultralow-Voltage Operations. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2019 , 27, 2344-2353 | 2.6 | 27 | |
| 467 | A 220-GHz Third-Harmonic Mixer Based on Balanced Structure and Hybrid Transmission Line. <i>IEEE Access</i> , 2019 , 7, 50007-50011 | 3.5 | 4 | |
| 466 | Novel High[Holding Voltage SCR with Embedded Carrier Recombination Structure for Latch-up Immune and Robust ESD Protection. <i>Nanoscale Research Letters</i> , 2019 , 14, 175 | 5 | 3 | |
| 465 | A Fully-Integrated Optoelectronic Detector With High Gain Bandwidth Product. <i>IEEE Access</i> , 2019 , 7, 53032-53039 | 3.5 | 3 | |
| 464 | A New Design Method for Solar Energy Harvesting System Based on Neural Network 2019, | | 3 | |
| 463 | WR-2.8 Band Pseudoelliptic Waveguide Filter Based on Singlet and Extracted Pole Resonator. <i>IEEE Access</i> , 2019 , 7, 54705-54711 | 3.5 | 5 | |
| 462 | A novel 4H-SiC trench MOSFET with double shielding structures and ultralow gate-drain charge. <i>Journal of Semiconductors</i> , 2019 , 40, 052803 | 2.3 | 8 | |
| 461 | Total-Ionizing-Dose Irradiation-Induced Dielectric Field Enhancement for High-Voltage SOI LDMOS. <i>IEEE Electron Device Letters</i> , 2019 , 40, 593-596 | 4.4 | 12 | |
| 460 | High performance enhancement-mode HEMT with 3DEG to conduct current and 3DHG as back barrier. <i>Superlattices and Microstructures</i> , 2019 , 130, 437-445 | 2.8 | 4 | |
| 459 | Multizone Gradient-Modulated Guard Ring Technique for Ultrahigh Voltage 4H-SiC Devices With Increased Tolerances to Implantation Dose and Surface Charges. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2019 , 7, 1505-1512 | 5.6 | 4 | |
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| 293 | NBTI of buried oxide layer induced degradation for thin layer SOI field pLDMOS 2016 , | | 2 |

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| 128 | High voltage SJ-LDMOS with charge-balanced pillar and NIbuffer layer 2012, | | 3 |
| 127 | The SuperJunction MOS-controlled thyristor (SJ-MCT) with low power loss for high-power switching applications 2012 , | | 6 |
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| 106 | 2011, | | 2 |
| 105 | A novel high voltage LIGBT with an n-region in p-substrate. <i>Journal of Semiconductors</i> , 2011 , 32, 11400 | 3 2.3 | |
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| 101 | An Advanced Spread Spectrum Architecture Using Pseudorandom Modulation to Improve EMI in Class D Amplifier. <i>IEEE Transactions on Power Electronics</i> , 2011 , 26, 638-646 | 7.2 | 43 |
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| 94 | Research on periodic switching frequency modulation for conducted EMI suppressing in power converter. <i>Microelectronics Journal</i> , 2011 , 42, 415-421 | 1.8 | 3 |
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| 90 | A novel lateral IGBT with a controlled anode for on-off-state loss trade-off improvement. <i>Journal of Semiconductors</i> , 2011 , 32, 074005 | 2.3 | 1 |
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| 83 | A digitally controlled PWM/PSM dual-mode DC/DC converter. <i>Journal of Semiconductors</i> , 2011 , 32, 115 | 50 0 73 | 1 |
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| 71 | An analytical model for high voltage thin-film Silicon On Insulator RESURF devices 2010 , | | 1 | |
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| 13 | A New Reduced Bulk Field (REBULF) High-Voltage LDMOS with N+-Floating Layer 2006 , | | 6 |
| 12 | A novel double RESURF LDMOS and a versatile JFET device used as internal power supply and current detector for SPIC. <i>Microelectronics Journal</i> , 2006 , 37, 574-578 | 1.8 | 21 |
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LIST OF PUBLICATIONS

| 4 | A novel improved PSM mode in DC-DC converter based on energy balance | 2 |
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| 3 | SLOP-LDMOS - a novel super-junction concept LDMOS and its experimental demonstration | 14 |
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